

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-000864**Date Inspected:** 14-Nov-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 1430**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	Zhang Zhong & Li Zhijiang			CWI Present:	Yes	No	
Inspected CWI report:	Yes	No	N/A	Rod Oven in Use:	Yes	No	N/A
Electrode to specification:	Yes	No	N/A	Weld Procedures Followed:	Yes	No	N/A
Qualified Welders:	Yes	No	N/A	Verified Joint Fit-up:	Yes	No	N/A
Approved Drawings:	Yes	No	N/A	Approved WPS:	Yes	No	N/A
				Delayed / Cancelled:	Yes	No	N/A
Bridge No:	34-0006			Component:	OBG - Closed Rib Trials & Mock Up		

Summary of Items Observed:

Orthotropic Box Girder (OBG):

The Caltrans Quality Assurance (QA) Inspector Charlie Franco was present at the time requested to randomly observe welding and associated operations being performed for the OBG.

Bay 3:

The QA Inspector randomly observed ZPMC machine operators utilizing magnetic drills to drill bolt holes in the flanges of T-Ribs for the OBG. The following photograph provides additional detail.

The QA Inspector randomly observed a ZPMC torch cutter utilizing a tracked semiautomatic torch cutting apparatus to cut side plate piece mark PL67 to length. The following photograph provides additional detail.

Bay 7:

The QA Inspector randomly observed ZPMC welder Yuan Wensong ID Number 055491, utilizing the Flux Cored Arc Welding (FCAW) Process with ZPMC approved Weld Procedure Specification (WPS)

WPS-B-T-2231-B-U2-F-1, to weld the fill and cover passes on Weld Joint (WJ) number FB003-E025-001 and WJ FB003-E025-006 on OBG Diaphragms. The QA Inspector observed ZPMC CWI Zhang Zhong monitoring weld parameters. The QA Inspector also performed random verification of the weld parameters and documented them as follows: welding amperage 203 amps, welding voltage 27.5 volts with a travel speed of 501.1 millimeters (mm)

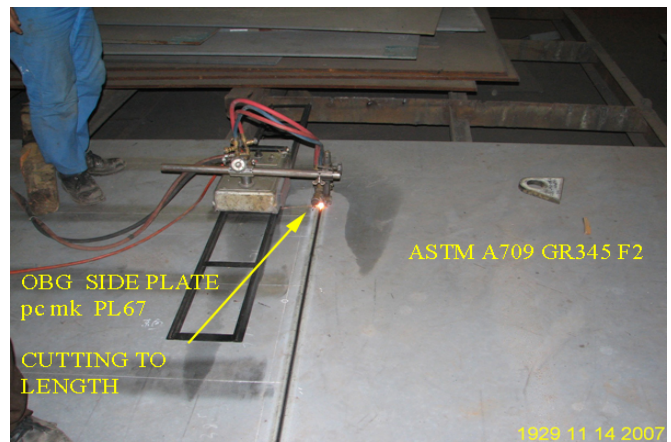
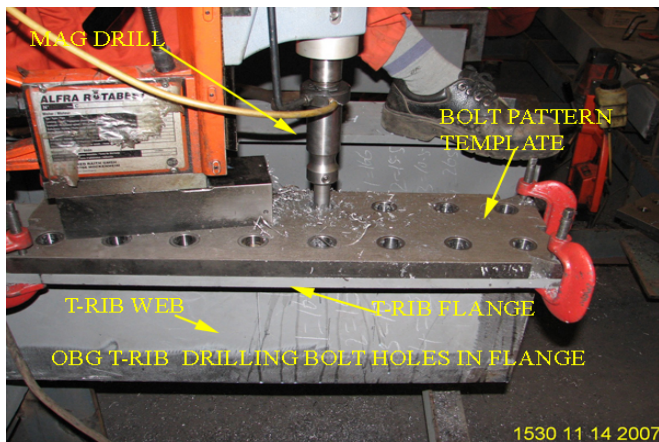
WELDING INSPECTION REPORT

(Continued Page 2 of 3)

per minute. Weld parameters appeared to comply with the above approved ZPMC WPS. The attached photograph provides additional detail.

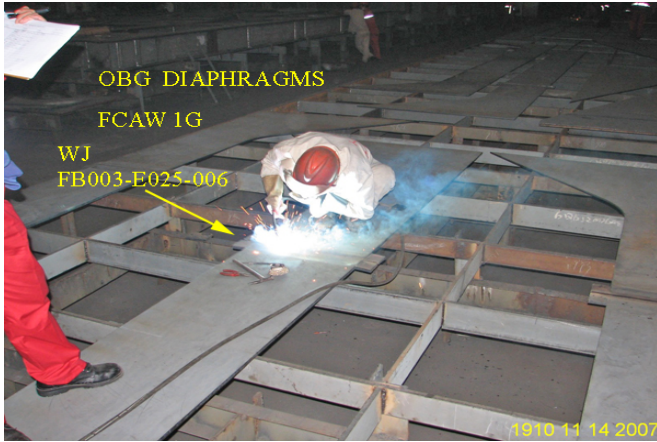
The QA Inspector randomly observed ZPMC welding personnel fitting up sections of OBG Diaphragms. The following photograph provides additional detail.

The QA Inspector randomly observed ZPMC tack welder Wang Changfa ID Number 058102, utilizing the Flux Cored Arc Welding (FCAW) Process with ZPMC approved WPS WPS-B-T-2231-B-U2-F-1, to tack weld 30 mm ASTM A709 GR345 T2 material to 12 mm ASTM A709 GR345 material at WJ FB002-E019-026, WJ FB001-W019-026 and WJ FB016-E019-026 on OBG Diaphragms. The QA Inspector observed ZPMC CWI Li Zhijiang monitoring weld parameters. The attached photograph provides additional detail.



WELDING INSPECTION REPORT

(Continued Page 3 of 3)



Summary of Conversations:

There were no relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Franco,Charlie	Quality Assurance Inspector
Reviewed By:	Cochran,Jim	QA Reviewer
